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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,638

03/27/2006

Andre Nicolet

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CANTOR COLBURN, LLP
20 Church Street
22nd Floor
Hartford, CT 06103

EXAMINER

FREGA, JOHN M

ART UNIT

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3633

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,638	Applicant(s) NICOLET, ANDRE	
	Examiner JOHN M. FREGA	Art Unit 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-27 and 32 is/are rejected.
- 7) ☒ Claim(s) 28-31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>27 March 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a first office action on the merits for application serial number 10/573,638 filed 27 March 2006. Claims 17-32 are pending.

Claim Objections

2. Claim 24 is objected to because of the following informalities: the claim contains a minor grammatical error. The examiner feels the claim should read: "The system as claimed in claim 17, wherein through openings for said deformable anchoring claws are locatedd at different heights from said drive-in spike."

3. Claim 30 is objected to because of the following informalities: Claim 30 recites the limitation "said ground-firming means" in lines 1 and 2 of the claim. There is insufficient antecedent basis for this limitation in the claim. As written, claim 30 depends on claim 26, which depends on claim 17 and neither claim makes reference to a ground-firming means. It is the examiner's opinion that claim 30 was intended to depend from claim 27 and has been examined as such. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claim 32 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 32 provides for the use of a “system as claimed in claim 17 for anchoring a land-survey bench-mark in the ground”, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 17-22, 24, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Green et al. in U.S. Patent# 1,796,147, herein referred to as Green.

In regards to claim 17, Green discloses a system for anchoring an object in the ground comprising: a stake including: a tube (item 1) with at one end a drive-in spike (item 2) and at the other end a tube head, said tube having a tube wall and being conceived to be inserted with its drive-in spike first, along a drive-in direction into the ground; a central support rod (item 6) which axially arranged within said tube, wherein it is axially guided in translation and prevented from rotating (the stake could not operate as disclosed if said central rod rotates), said central rod having an upper end near said head of said tube and a lower end near said drive-in spike of said tube, said upper end being equipped with a first coupling means (holes, item 20); at least two deformable

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anchoring claws (item 4), each of said anchoring claws having one end which is borne by said lower end of said central support rod and another end passing through a through opening in said tube wall near said drive-in spike, said through openings having a geometry such that they cause said anchoring claws to deploy at an angle along said tube in the opposite direction to said drive-in direction when an axial traction is exerted on said central support rod in the opposite direction to said drive-in direction; and means for employing said anchoring stake including: a threaded rod (item 21) for exerting said axial traction on said central support rod, said threaded rod including a first end and a second end, said first end being equipped with a second coupling means (item 22) able to collaborate with said first coupling means at said upper end of said central support rod; and a nut (item 24) screwed on said second end of said threaded rod, wherein, for exerting said axial traction on said central support rod in the opposite direction to said drive-in direction, said second coupling means is coupled to said first coupling means equipping said upper end of said support rod, and said nut screwed on said upper end of said threaded rod is rotated in a first direction while it bears on said tube head.

8. In regards to claim 18 and as can be seen in an embodiment as shown in figure 4, Green discloses the system as claimed in claim 17, wherein said means for employing said anchoring stake further include: a locking means (item 11) connected to said tube head in such a way as to form a backstop for said nut when the latter is turned in a second direction, opposite to said first direction, in order thus to cause a

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translational movement of said threaded rod toward the inside of said tube and cause said claws to retract back inside said tube.

9. In regards to claim 19, Green discloses the system as claimed in claim 18, wherein said locking means is an element that can be removably connected to said tube head (item 11 is a threaded nut which is removable).

10. In regards to claim 20, Green discloses the system as claimed in claim 19, wherein: said nut comprises a base; said tube head comprises a collar (item 9); and said locking means is a stirrup piece straddling said base and said collar (as seen in figure 4).

11. In regards to claim 21, Green discloses the system as claimed in claim 17, wherein said first and second coupling means form a coupling with a helical connection or a bayonet connection. (such a connection between the first, item 26, and second, item 22, coupling means as shown in figure 4 is a bayonet connection).

12. In regards to claim 22, Green discloses the system as claimed in claim 17, wherein said anchoring claws are deformable rods (as best understood by applicant's disclosure the "deformable rods" that comprise the anchoring claws are formed from "any material allowing plastic or elastic deformation of the claws without breakage as they deploy", the claws as disclosed by Green are also deformable in this sense, as they extend from the tube into the soil in the same manner and retract without breakage.)

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13. In regards to claim 24, Green discloses the system as claimed in claim 17, wherein through openings (a plurality of item 3) for said deformable anchoring claws are located at different heights from said drive-in spike (as can be seen in figure 2 particularly).

14. In regards to claim 26, Green teaches the system as claimed in claim 17, wherein said lower end and said upper end of said central support rod are axially guided in said tube. On page 1, lines 89-91, Green discloses that the central support rod is "reciprocally movable vertically within the tubular case coaxial therewith."

15. In regards to claim 27, Green discloses the system as claimed in claim 17, further comprising ground-firming means (item 10) arranged around said tube at said tube head end.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green as applied to claim 17 above. In regards to claim 23, Green discloses the system of claim 22, wherein said central support rod has a round cross section, and said anchoring claws are arranged through openings (item 3) for said deformable rods.

Green does not disclose that said tube has a square cross section with four corners with openings arranged in said corners and is silent as to the exact shape of the cross section.

It would have been obvious to one having ordinary skill in the art at the time the invention as made to provide the tube as disclosed by Green with a square cross section and the deformable rods with a round cross section, as a change in the shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). There is no unexpected or unpredictable result achieved by using a tube of a square cross-section in the tube of Green.

18. In regards to claim 25, Greene discloses the system of claim 24 wherein said anchoring claws are borne by a plate (item 7) fixed to said lower end of said central support rod.

Green does not disclose that the claws have different length, but rather is silent as to the length of each anchoring claw.

It would have been an obvious matter of design choice to provide the anchoring means of Green such that each anchoring claw is of a different length, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level or ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). There would be no unexpected or unpredictable result achieved by using anchoring claws of different lengths. Longer anchoring claws would extend further into the soil and placing longer anchoring claws at the base of the

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rod of Green would require more force to remove the claws from the soil creating a more secure connection once the rod was inserted into the soil.

19. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Green as applied to claim 17 above, and further in view of Gallup in U.S. Patent# 3,507,081. Green discloses the system of claim 17 but not the use of said system for the anchoring of a land-survey bench-mark in the ground.

Gallup discloses that the use of a ground anchoring means as a bench marking tool in surveying is well known in the art.

It would be obvious therefore to use the anchoring means of Greene as a land-survey bench mark. A land-survey benchmark is used as a controlling point for land surveys and therefore its location is preferably permanent. Green discloses an anchor that is designed to be capable of being permanently installed into the ground and would therefore be suitable for such an application.

Allowable Subject Matter

20. Claims 28-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

21. The following is a statement of reasons for the indication of allowable subject matter: In regards to claims 28-30, while a ground firming means as attached to a ground anchoring system that provides a central canal through which a ground anchoring tube may pass is known in the art (as seen in prior art such as U.S. Patent# 3,011,597 to Galloway, et. al.) the prior art does not teach a ground anchor as claimed that is formed of two separable pieces that form the shape of an inverted cone or pyramid nor that comprise two T sections extending at an angle along the upper part of said tube. In regards to claim 31, a mandrel equipped with a shoulder able to bear against a collar surrounding said tube head in order to drive said ground anchoring tube into the ground is not known in the art nor would it be obvious to combine such a system into a ground anchor such as the anchor as taught by Green.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent # 1,907,811, 3,011,597, 3,135,365, 3,526,069,

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3,763,655, 3,803,783, 3,924,371, 4,178,726, 4,592,178.4,833,846. All disclose structurally similar ground anchoring means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN M. FREGA whose telephone number is (571)270-3662. The examiner can normally be reached on Monday through Thursday, 7:30am-5:30pm E.D.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. M. F./
Examiner, Art Unit 3633

jmf

/Robert J Canfield/
Supervisory Patent Examiner, Art Unit 3635